

## PATENT COOPERATION TREATY

PCT

## NOTIFICATION OF ELECTION

(PCT Rule 61.2)

From the INTERNATIONAL BUREAU

To:

Assistant Commissioner for Patents  
United States Patent and Trademark  
Office  
Box PCT  
Washington, D.C.20231  
ETATS-UNIS D'AMERIQUE

in its capacity as elected Office

<b>Date of mailing (day/month/year)</b> 22 May 2000 (22.05.00)	
<b>International application No.</b> PCT/SE99/01893	<b>Applicant's or agent's file reference</b> 98 P 2024 P
<b>International filing date (day/month/year)</b> 21 October 1999 (21.10.99)	<b>Priority date (day/month/year)</b> 27 October 1998 (27.10.98)
<b>Applicant</b> BRAND, Paul et al	

1. The designated Office is hereby notified of its election made:

☒ in the demand filed with the International Preliminary Examining Authority on:

23 March 2000 (23.03.00)

☐ in a notice effecting later election filed with the International Bureau on:2. The election ☒ was☐ was not

made before the expiration of 19 months from the priority date or, where Rule 32 applies, within the time limit under Rule 32.2(b).

<p>The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland</p> <p>Facsimile No.: (41-22) 740.14.35</p>	<p>Authorized officer</p> <p>F. Baechler</p> <p>Telephone No.: (41-22) 338.83.38</p>
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## PCT PATENT COOPERATION TREATY

PCT

NOTIFICATION OF THE RECORDING  
OF A CHANGE(PCT Rule 92bis.1 and  
Administrative Instructions, Section 422)

From the INTERNATIONAL BUREAU

To:

WATZ, Per-Erik  
St. Jude Medical AB  
Patent Department  
S-175 84 Järfälla  
SUÈDE

Date of mailing (day/month/year) 19 December 2000 (19.12.00)	
Applicant's or agent's file reference 98 P 2024 P	<b>IMPORTANT NOTIFICATION</b>
International application No. PCT/SE99/01893	International filing date (day/month/year) 21 October 1999 (21.10.99)

1. The following indications appeared on record concerning:									
<input type="checkbox"/> the applicant	<input type="checkbox"/> the inventor <input checked="" type="checkbox"/> the agent <input type="checkbox"/> the common representative								
Name and Address PACESETTER AB Patent Dept. S-175 84 Järfälla Sweden	<table border="1"> <tr> <td>State of Nationality</td> <td>State of Residence</td> </tr> <tr> <td colspan="2">Telephone No. 46 8 474 40 72</td> </tr> <tr> <td colspan="2">Facsimile No.</td> </tr> <tr> <td colspan="2">Teleprinter No.</td> </tr> </table>	State of Nationality	State of Residence	Telephone No. 46 8 474 40 72		Facsimile No.		Teleprinter No.	
State of Nationality	State of Residence								
Telephone No. 46 8 474 40 72									
Facsimile No.									
Teleprinter No.									
2. The International Bureau hereby notifies the applicant that the following change has been recorded concerning:									
<input type="checkbox"/> the person <input checked="" type="checkbox"/> the name <input checked="" type="checkbox"/> the address <input type="checkbox"/> the nationality <input type="checkbox"/> the residence									
Name and Address WATZ, Per-Erik St. Jude Medical AB Patent Department S-175 84 Järfälla Sweden	<table border="1"> <tr> <td>State of Nationality</td> <td>State of Residence</td> </tr> <tr> <td colspan="2">Telephone No. +46-8-474- 45 71</td> </tr> <tr> <td colspan="2">Facsimile No. +46-8-761 29 05</td> </tr> <tr> <td colspan="2">Teleprinter No.</td> </tr> </table>	State of Nationality	State of Residence	Telephone No. +46-8-474- 45 71		Facsimile No. +46-8-761 29 05		Teleprinter No.	
State of Nationality	State of Residence								
Telephone No. +46-8-474- 45 71									
Facsimile No. +46-8-761 29 05									
Teleprinter No.									
3. Further observations, if necessary:									
4. A copy of this notification has been sent to:									
<input checked="" type="checkbox"/> the receiving Office	<input type="checkbox"/> the designated Offices concerned								
<input type="checkbox"/> the International Searching Authority	<input checked="" type="checkbox"/> the elected Offices concerned								
<input type="checkbox"/> the International Preliminary Examining Authority	<input type="checkbox"/> other:								

The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland  Facsimile No.: (41-22) 740.14.35	Authorized officer  J. Leitao  Telephone No.: (41-22) 338.83.38
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# PCT

## INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference 98 P 2024 P	<b>FOR FURTHER ACTION</b> See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)	
International application No. PCT/SE99/01893	International filing date (day/month/year) 21/10/1999	Priority date (day/month/year) 27/10/1998
International Patent Classification (IPC) or national classification and IPC A61N1/375		
Applicant PACESETTER AB et al		

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.



2. This REPORT consists of a total of 5 sheets, including this cover sheet.

- ☐ This report is also accompanied by ANNEXES, i.e. sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

These annexes consist of a total of sheets.

3. This report contains indications relating to the following items:

- I ☒ Basis of the report
- II ☐ Priority
- III ☐ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- IV ☐ Lack of unity of invention
- V ☒ Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- VI ☐ Certain documents cited
- VII ☐ Certain defects in the international application
- VIII ☒ Certain observations on the international application

Date of submission of the demand  23/03/2000	Date of completion of this report  11.10.00
Name and mailing address of the international preliminary examining authority:   European Patent Office D-80298 Munich Tel. +49 89 2399 - 0 Tx: 523656 epmu d Fax: +49 89 2399 - 4465	Authorized officer  Held, G  Telephone No. +49 89 2399 2248  

# INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No. PCT/SE99/01893

## I. Basis of the report

1. This report has been drawn on the basis of (*substitute sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to the report since they do not contain amendments.*):

### Description, pages:

1-12 as published

### Claims, No.:

1-9 as published

### Drawings, sheets:

1/2-2/2 as published

2. The amendments have resulted in the cancellation of:

- ☐ the description, pages:
- ☐ the claims, Nos.:
- ☐ the drawings, sheets:

3. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2(c)):

4. Additional observations, if necessary:

# INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No. PCT/SE99/01893

## V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

### 1. Statement

Novelty (N)	Yes:	Claims	1 - 9
	No:	Claims	
Inventive step (IS)	Yes:	Claims	1 - 9
	No:	Claims	
Industrial applicability (IA)	Yes:	Claims	1 - 9
	No:	Claims	

### 2. Citations and explanations

**see separate sheet**

## VIII. Certain observations on the international application

The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made:

**see separate sheet**

**INTERNATIONAL PRELIMINARY  
EXAMINATION REPORT - SEPARATE SHEET**

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International application No. PCT/SE99/01893

**1. Re Item V**

**Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

Reference is made to the following document:

D1: US-A-4 934 366

1.1 The document D1 is regarded as being the closest prior art to the subject-matter of independent claim 1, and discloses (the references in parentheses applying to this document):

A pacemaker housing comprising a connector means adapted to receive a contact plug, said connector means comprising a tubular member located inside said housing (Fig 6A).

The differentiating feature of the subject-matter of independent claim 1 in comparison with document D1 is that all means for contacting the contact surfaces being located within a tube and that said tube further contains an insulating plug which holds said means for contacting.

The advantages are that the connective part is simple to manufacture and to mount in the pacemaker housing while providing a high strength and a high durability of the connective part.

The available prior art documents do not show such specific connector part nor give any hint to manufacture a pacemaker housing comprising the features defined in the characterizing part of claim 1. Thus, the subject-matter of independent claim 1 fulfills the requirements of Article 33(2) - (4) PCT.

1.2 Claims 2 - 9 are dependent on claim 1 and as such also meet the requirements of the PCT with respect to novelty and inventive step.

**2. Re Item VIII**

**Certain observations on the international application**

**INTERNATIONAL PRELIMINARY  
EXAMINATION REPORT - SEPARATE SHEET**

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International application No. PCT/SE99/01893

2.1 According to Article 5 PCT, all essential features should be incorporated in the description and should be understood without reference to any other document. Thus, the expressions on page 2, line 13, page 6, line 34 and page 7, line 23 concerning the incorporation by reference should have been deleted.

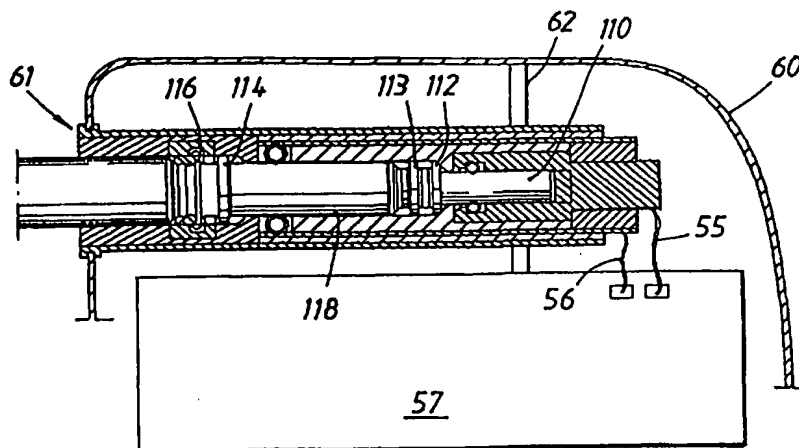
2.2 According to the requirements of Rule 11.13(I) reference signs not appearing in the description/claims shall not appear in the drawings, and vice versa. This requirement is not met in view of the reference sign "111" mentioned in claims 1 and 6 and page 7, line 33.



## INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification 7 : <b>A61N 1/375</b>	<b>A1</b>	(11) International Publication Number: <b>WO 00/24462</b> (43) International Publication Date: <b>4 May 2000 (04.05.00)</b>
(21) International Application Number: <b>PCT/SE99/01893</b> (22) International Filing Date: <b>21 October 1999 (21.10.99)</b> (30) Priority Data: <b>9803693-2</b> <b>27 October 1998 (27.10.98)</b> <b>SE</b> (71) Applicant (for all designated States except US): <b>PACESETTER AB [SE/SE]; S-175 84 Järfälla (SE).</b> (72) Inventors; and (75) Inventors/Applicants (for US only): <b>BRAND, Paul [SE/SE];</b> <b>Travärvägen 31, S-175 39 Järfälla (SE). HILL, Rolf</b> <b>[SE/SE]; Gösvägen 8, S-175 55 Järfälla (SE).</b> (74) Common Representative: <b>PACESETTER AB; Patent Dept.,</b> <b>S-175 84 Järfälla (SE).</b>		(81) Designated States: <b>US, European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE).</b> Published <i>With international search report.</i> <i>Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.</i>

(54) Title: A HOUSING, WITH A TUBULAR CONNECTOR, FOR A HEART STIMULATOR



## (57) Abstract

The present invention relates to a pacemaker housing (60) comprising a connector means adapted to receive a contact plug (110) on the proximal end of a lead (15) with an electrode located on the distal end of said lead, said housing being made of metal, said connector means comprising a tubular member having two ends and being located inside said housing, a first end (22, 122) of said tubular member being welded or bonded to an opening in a wall of said housing, the second end (23, 123) of said tubular member being closed. Said tubular member comprises a tube (21, 121) made of a metal being weldable or bondable to said metal housing, said tube being structurally intact along its entire length, all interior means (27, 127, 28, 128, 50, 150, 51, 151) in said tube for contacting the contact surfaces (111, 118) on said plug being located within the enclosure formed by said tube, said tube further containing at least one insulating ceramic plug (26, 126) being coaxial with said tube and holding said interior means for contacting said contact surfaces on said plug.



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EE	Estonia			SG	Singapore		

## INTERNATIONAL SEARCH REPORT

International application No.

PCT/SE 99/01893

## A. CLASSIFICATION OF SUBJECT MATTER

IPC7: A61N 1/375

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC7: A61N

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

SE,DK,FI,NO classes as above

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

WPI, EDOC

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 4934366 A (B.E. TRUEX ET AL), 19 June 1990 (19.06.90), figures 4,6, abstract --	1-7
A	US 4278093 A (R. LAFORTUNE ET AL), 14 July 1981 (14.07.81), figure 1, abstract --	1-7
A	US 5545188 A (J.I. BRADSHAW ET AL), 13 August 1996 (13.08.96), figure 1, abstract --	1-7
A	EP 0261582 A1 (SIEMENS ELEMA AB), 30 March 1988 (30.03.88), figure 1, abstract ----- --	1-7

☐ Further documents are listed in the continuation of Box C.☒ See patent family annex.

## \* Special categories of cited documents:

- "A" document defining the general state of the art which is not considered to be of particular relevance
- "E" earlier document but published on or after the international filing date
- "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- "O" document referring to an oral disclosure, use, exhibition or other means
- "P" document published prior to the international filing date but later than the priority date claimed

"I" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance: the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance: the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&amp;" document member of the same patent family

Date of the actual completion of the international search

16 February 2000

Date of mailing of the international search report

24-02-2000

Name and mailing address of the ISA

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**INTERNATIONAL SEARCH REPORT**  
Information on patent family members

02/12/99

International application No.  
PCT/SE 99/01893

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 4934366 A	19/06/90	AU 625115 B	02/07/92
		AU 5175390 A	18/04/91
		DE 69027846 D,T	21/11/96
		EP 0448651 A,B	02/10/91
		JP 4503021 T	04/06/92
		JP 5067312 B	24/09/93
		WO 9104069 A	04/04/91
		AU 611328 B	06/06/91
		AU 4308089 A	02/04/90
		DE 68921744 D,T	23/11/95
		EP 0404877 A,B	02/01/91
		SE 0404877 T3	
		JP 3502656 T	20/06/91
		WO 9002581 A	22/03/90
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US 4278093 A	14/07/81	NONE	
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US 5545188 A	13/08/96	NONE	
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EP 0261582 A1	30/03/88	DE 3783110 A	28/01/93
		US 4913147 A	03/04/90
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